

# THE CONDOR

VOLUME 55

NOVEMBER-DECEMBER, 1953

NUMBER 6

## BREEDING HAUNTS OF THE STEPHENS WHIP-POOR-WILL

By JOHN L. BLACKFORD

Nearly seventy-five years ago William Brewster (1881:69) named a large, western subspecies of the Whip-poor-will as *Antrostomus vociferus arizonae*. It was based on a specimen taken by Frank Stephens in the Chiricahua Mountains of southeastern Arizona. Certain questions concerning the egg coloration and breeding habits of this form were posed almost at once when Brewster (1882:212) described the single egg available that was collected in 1880, by Stephens. Brewster said: "The egg is white with a dull gloss. At first sight it appears to be immaculate, but a closer inspection reveals a few faint blotches of the palest possible purple, so faint indeed that they might pass for superficial stains were it not for the fact that they underlie the external polish. The absence of well-defined markings may probably be explained by the assumption that the bird had laid one or more clutches earlier in the season, thus exhausting her supply of coloring pigment."

Bendire (1895:152) quotes Stephens concerning this egg as follows: "Incubation was advanced. I do not agree with Mr. Brewster (to whom I presented the egg) in thinking that it was a second brood. My opinion is that this species is a late breeder, as it is also a late migrant."

Bendire (1895:153) describes the remnants of a second set as uniformly pale cream colored and apparently unspotted and remarks that the egg of this form is evidently but slightly marked. In this respect it is different from the egg of its eastern counterpart.

Herbert Brandt states in a letter to the writer April 15, 1952: "The reason that I wished particularly to get a set or two of personally taken eggs of this bird was because there seems to be a controversy as to whether or not they are somewhat mottled with the lilac and other shades, or are flat white, (or) like the Poor-will's which has a creamy brown color."

Efforts to find nests usually have been unrewarded. Swarth, Bent, Brandt, and many others who have worked in Arizona failed in their searches. Yet all agree that the bird is common within a rather extensive range north of the border. Nevertheless, the writer thinks that the information accumulated over the last seventy-five years is now sufficient to indicate something of the breeding haunts of this subspecies. At least eight nests have been reported and I am able to give details of another which I found.

The range of the race *arizonae* is from the mountains of southern Arizona, New Mexico, and southwestern Texas south through the mountains of northern Mexico to Guanajuato. It winters south to Guatemala. In southern Arizona and New Mexico the bird arrives usually at the end of April, but Bailey (1928:339) records one as early as March 2. Normal summer residence continues until the end of September.

The Stephens Whip-poor-will has been taken, seen, or heard when in its summer range, and in the breeding season, from approximately 5000 up to nearly 10,000 feet elevation in southeastern Arizona, and from 6000 and 8000 feet in southwestern New Mexico. This altitudinal range extends from the lower limits of the wooded Upper Sonoran Life-zone into lower levels of the Canadian.

## HABITAT

The widely differing cover types as variously observed for this subspecies may be reviewed, beginning at lower elevations:

Blackford: May 31 to June 3, 1946; at Cochise Park in the Dragoon Mountains, southern Arizona; heard whip-poor-wills on two nights, in small foothill oaks and mixed scrub lying between the park and the border of the desert grassland about a mile and a half away.

Blackford: June 7, 8, 9, 1946; lower camp grounds, Cave Creek Canyon, Chiricahua Mountains, below fork of Cave Creek and South Fork roads; heard whip-poor-wills one or two evenings among live oaks and sycamores of the streamside forest; Cave Creek was dry that month.



Fig. 1. Habitat of Whip-poor-will in Chiricahua Mountains, Arizona, in upper oak and pine belt.

Bent (1940:184): "A. J. van Rossem (1936) writes: In the Santa Ritas they showed a decided preference for groves of oaks and sycamores in the cañon bottoms, and nearly all of those which were found at night were feeding in the immediate vicinity of running water."

Bailey (1923:24): "Found by Stephens, May 11, 1881, in Madera Canyon, and taken by Nelson July 4 and 6, 1884, in the mountains above Gardner's, its favorite resorts apparently being the rocky sides of canyons."

Bailey (1928:340): head of McKittrick Canyon in the Guadalupe Mountains, New Mexico; about "campfire under the pines."

Bendire (1895:152): A. K. Fisher met [it] "when we made camp at the mouth of Rucker Canyon, some forty miles south of the Post, in the Chiricahua Mountains . . . we heard a few, and a couple of days later found the species abundant higher up in the same canyon, among the pines (*P. ponderosa*)."

Brandt (1951:553): heard it nightly from a mossy log among yellow pines of Rustler Park, high in the Chiricahua Mountains. Also (p. 39) he includes it in the Aspen Grove bird list for the Canadian Life-zone; the high habitat area, where Dr. Fisher heard a few whip-poor-wills every night, on both Fly [elevation 9795 feet] and Chiricahua peaks is richly mantled with a solid stand of Engelmann spruce, golden aspen, and Douglas fir in varying ratios according to altitude, slope exposure, or other conditions.

In summary it may be stated that this whip-poor-will occurs during the breeding season from lower oaklands on up through oak-sycamore canyon-floor forest into the high, extensive yellow pinelands, the aspen woods, and the highest Douglas fir-Engelmann spruce forests at the summits of the mountains.

#### NEST SITES AND BREEDING RECORDS

The following eight nest records evidently constitute most of the published accounts:

Stephens (Bendire, 1895:151-152) states of his initial discovery of a breeding bird on July 4, 1880: "The latter flew off her nest, which, as usual, was only a very slight depression in the ground, but in this case was overhung by a rock. . . . The locality where I found the egg was a gulch near the summit of the Chiricahua Mountains, in a thick forest of yellow pine."

A. K. Fisher's notes sent to Bendire (1895:152) state: "On June 5 Mr. Fred Hall Fowler found a nest, if the slight depression in the ground can be so designated, on a steep side hill about 50 feet above the stream. It was situated under an overhanging bush at the edge of a flat rock, and contained two young, recently hatched, and the fragments of egg shells from which they emerged." These were the shell fragments described by Bendire.

Smith (1900:89) reported two sets taken by O. C. Poling in the Huachuca Mountains: two fresh eggs on May 12, and two eggs on May 22, 1899 [=1898]. Smith said that the two sets "very much resemble in shape and color sets of the common Poor Will in his collection, being possibly a trifle larger, and one egg of each set has a few almost imperceptible pinkish spots on one end, the other egg in each set being unspotted."

Bent (1940:184-185) reports that Frank C. Willard found one in the Huachuca Mountains on May 24, 1899; the nest was on the ground at the base of a bush, and the eggs were lying in a few dead leaves; it was at an elevation of about 6000 feet.

Bent (1940:185-186) says van Rossem (1936) found this whip-poor-will nesting in the Santa Rita Mountains, Arizona, and reported as follows: "Though males, and sometimes, before eggs were laid, mated pairs, were invariably found in the cañon beds, the two nests discovered were on hillsides at least a quarter of a mile from water." A nest there on June 6, 1931, contained one egg; another on June 27, 1932, contained one egg and one chick. The single egg "was by no means immaculate white, but was clouded and mottled with brown and lilac, mostly in the nature of semi-concealed shell markings. It was similar to but very much less highly colored than eggs of the eastern *vociferus*, however." The egg in the nest with the chick was pure white.

Bent (1940:186) also reported a set of two eggs in the Thayer collection, taken in the Chiricahua Mountains, Arizona, on June 6, 1904, by Virgil W. Owen, that are decidedly spotted. These eggs are oval and only moderately glossy. The ground color is pure white, and both eggs are finely and irregularly marked with small spots and minute dots of "pale Quaker drab," "pallid Quaker drab," and very pale "clay color."

Chandler S. Robbins, of the United States Fish and Wildlife Service, advises me by letter of April 3, 1953: "The only records we find in addition to those you listed are some manuscript notes from F. W. Willard who states that this species is common in Cochise and Pima counties, Arizona. He gave May 27 as his earliest egg date, July 14 as the latest, and June 5 as the average. His earliest date of hatching young is given as June 20. The year was not stated for any of these records."

On June 4, 1946, in the Chiricahua National Monument, while I was descending steep rocky ledges three miles from Massai Point and perhaps 300 feet lower in elevation, I was startled at about 9 o'clock in the morning to hear the call of a whip-poor-will

close at hand. It was below me in the understory near the bottom of a ravine. The notes were unusually harsh and not the full call. They were not repeated, so I continued the descent another 25 feet and had just started along a horizontal ledge when I flushed a



Fig. 2. Nest and eggs of Stephens Whip-poor-will, June 4, 1946.

different bird from its nest and eggs. Apparently it was the female, and she half alighted down hill on some nearby shrubbery that was bowed over and offered a temporary perch. Then half-heartedly decoying, she dropped away down into the undercover. The two eggs lay on dry oak-leaf and pine-needle litter on the 4-foot rocky ledge, close to the perpendicular, lichen-grown canyon wall; this was about 50 feet above the bottom of a ravine. No further glimpse of the bird was obtained and no other call was given. The nesting ledge was in the oak-pine border at the upper limits of the Upper Sonoran Zone. Before leaving I picked up each egg, examined it closely, but briefly, and noted that each was a rather lustreless white, unmarked except for slight earth-smudges where it had rested on the ground.

On June 6, 1946, I returned with flash outfit as well as camera. Approaching cautiously, I gained a vantage point as close as eight feet. The sitting bird partly opened her eyes and seemed about to leave, but quietness on my part resulted in her sleepily closing them again to just a narrow slit. Finally to get on with the pictures, I stepped close and flushed her from the eggs. In the remainder of the day until about 2 o'clock, giving her intervals to warm the eggs, I obtained four negatives. She usually persisted in taking the same position upon the eggs, did not shift position at my closer approach, and then flushed quickly.

## CONCLUSIONS

It may now be stated with considerable assurance that egg coloration of the Stephens Whip-poor-will normally shows considerable variation. It may be immaculate white, white with underlying faint blotching or mottled clouding, commonly of brown and lilac, pale clay color with definite spotting, or even uniform coloring of pale cream. At least slight color variation may occur within a single set. Even so, the eggs are quite different from the well marked eggs of the eastern race, *Antrostomus vociferus vociferus*.



Fig. 3. Stephens Whip-poor-will on nest in Chiricahua Mountains, June 6, 1946.

Poling's record of two eggs for May 12, 1899, and Fowler's two chicks on June 5, 1894, of course show that the bird is not a late breeder as thought by Stephens. Nor may it be deemed a truly late migrant in view of the fact that it reaches high levels in the mountains by April 30.

The principal breeding habitat is the forested, rocky ravines, outcrops, and escarpments of the upper oak and lower pine belts of the high Upper Sonoran and low Transition life-zones. But this whip-poor-will is also characteristic of the yellow pine association, breeding generally in similar situations. Lower canyon oaklands and the oak-sycamore canyon bottoms where rocky ledges, abutments, and steep hillsides are common, afford preferred nesting sites at lesser elevations.

While foraging during the breeding season and afterward these whip-poor-wills are seen commonly in the open pinelands above the oak-pine borders, and in the open aspen groves and parks. Unrewarded searching in the aspen groves and pine parks seems to indicate they do not actually nest in such areas. Calling males in the Douglas fir and spruce areas may not represent resident breeding birds but merely vociferous, wide-ranging individuals drawn to the uppermost altitudes by insect-hunting opportunities there.

## LITERATURE CITED

- Bailey, F. M.  
1923. Birds recorded from the Santa Rita Mountains in southern Arizona. Pac. Coast Avif. No. 15:1-60.
- Bendire, C.  
1895. Life histories of North American birds, 2:ix+548 pp.
- Bent, A. C.  
1940. Life histories of North America cuckoos, goatsuckers, hummingbirds and their allies. U. S. Nat. Mus. Bull. 176:viii+506 pp.
- Brandt, H.  
1951. Arizona and its bird life (Cleveland, Ohio, The Bird Research Foundation).
- Brewster, W.  
1881. Notes on some birds from Arizona and New Mexico, etc. Bull. Nutt. Ornith. Club, 6:65-73.  
1882. On a collection of birds lately made by Mr. F. Stephens in Arizona. Bull. Nutt. Ornith. Club, 7:191-212.
- Smith, P. W.  
1900. Nesting of Stephens' whip-poor-will. Osprey, 4:89.
- Libby, Montana, May 15, 1953.*